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Attaining Career Decision Self-Efficacy in Life: Roles of the Meaning in Life and the Life Satisfaction

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Abstract The present study examines the roles of the meaning in life and the life satisfaction on university students' Career Decision Self-Efficacies (CDSE). Turkish university students [n = 440, 332 females (75.5%) and 108 males (24.5%)] aged 18–21 years [the mean age of 20.90 years (sd = 1.97)] were recruited from a state university located in the Eastern Black Sea Region in Turkey through a convenient sampling method. In the study, The Career Decision Self-Efficacy Scale- Short Form (Işık 2010), the Meaning in Life Scale (Demirbaş 2010) and the Life Satisfaction Scale (Köker 1991) were used as instruments. The collected data were analyzed through the Pearson product-moment correlation coefficient technique and multiple linear regression analysis. Pearson correlations revealed that life satisfaction (r = 0.446, p < 0.01) and the meaning in life (r = 0.167, p < 0.01) were positively related to CDSE. Also, multiple linear regression revealed that life satisfaction and the meaning in life are significant predictors of CDSE.

Keywords Career decision · Self-efficacy · The meaning in life · Life satisfaction

Introduction

In recent years, the major economic crisis and the increase in unemployment in the world have brought out the importance of career decision-making once more. This was discussed in 2015 G20/ Turkey and it was highlighted that new steps are supposed to be taken for youth education and their employment issues (Ministry of Foreign Affairs- Republic of Turkey 2015), which is considered to be more important for university students in their first step of their career. Therefore, career experts and career counselors are forced to do some more research on the determination of which variables influence the career decision-making process of university students.

In career counseling, there are some critical periods influencing the career decision-making process, one of which is university period (Colozzi and Colozzi 2000,p. 81; Hartung and Niles 2000, p.17; Lent et al. 2002; Lin and Flores 2013). During this period, individuals try to identify the best career for themselves with a sense of self-efficacy. Social Cognitive Career Theory (SCCT) in career counseling studies has been one of the most commonly used approaches in the last 20 years and these studies emphasize that individuals depend on their own internal and social dynamics in the career development process (Lent and Hackett 1994). SCCT is a modern career theory developed by Lent et al. (1994), depending on Bandura's theory (1986), which stresses that individuals have a great capacity to direct their own career behavior. There are three important concepts put forward by this theory. These are self-efficacy expectations, Vocational Outcome Expectations (VOE) and goal setting. These concepts play an active role in the process of selecting a career (Lent et al. 1994). In the present study, Career Decision Self-Efficacy (CDSE), one of the most important concepts of SCCT, is dealt with to determine which variables influence the career decision-making process of individuals. CDSE was developed on the basis of Bandura's (1982) concept of self-efficacy expectations which are referred to as self-belief in fulfilling one's own expectation (Bandura 1982, 1986, 1997). Lent et al. (1994) are the first researchers to incorporate self-belief into the career decision-

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making process. They describe CDSE as one's self-belief in fulfilling his/her career tasks (e.g. career research, awareness of one's own knowledge and skills, decision-making), depending on the self-efficacy theory. Especially, university years are critical to fulfilling these career tasks.

The importance of these years once again comes out upon examining the career counseling literature. Based on SCCT, especially the studies on university students (e.g., Fouad et al. 2009; Gibbons and Shoffner 2004; Luzzo and Day 1999; Reese and Miller 2006; Scott and Ciani 2008; Sung et al. 2013) verify that. During this period, the determination of which variables influence the career decision-making process of individuals is considered to be important in order to contribute to the studies of career experts. The present study puts together the concept of career and the popular concepts of positive psychology, called the meaning in life and life satisfaction. It is thought that the career experts working on the basis of SCCT need more results obtained from the studies on life in helping their consultants about their careers. Besides, considering life and career as a whole (Super 1957), further research are needed to be carried out as a result of the literature search. Therefore, the meaning in life and life satisfaction are incorporated into the present study.

The Meaning in Life and Career Decision Self-Efficacy

Humans' researching the meaning in life is based on the foundation of existentialism philosophy. According to existentialism, one initially comes into being and then recreates oneself by choosing from opportunities. In recreating, one's consciousness and will are important (Metz 2013). Therefore, the concept of the meaning in life has been the subject of research in psychology since the 1960s. Many researchers have interpreted this philosophy according to their own perspective. For instance, according to Kierkegaard, individuals are of participatory roles and they themselves are decision-makers in their lives (Cited, Maclntyre 2001). Maslow (1987) claims that human motivation is determined by some basic needs. Baumeister and Wilson (1996) state that there are four basic needs for the meaning in life. These are the aim in life, justification and sense of value, self-worth, and usefulness. The first clinical trials in the quest for the meaning in life are based on Frankl's logotherapy. According to Frankl, the quest for the meaning in life is a basic instinct in one's life (Frankl 1985, p.8). According to Yalom (1985), the meaning in life is related to whether life itself or, at least, a human oneself entirely fits a consistent pattern. Park and Folkman (1997) allege that there is a wide variety of definitions of the meaning in life range conceptually and empirically which complement one another. Given the general perception from the recent studies (Hicks and Routledge 2013; Metz 2013; Steger et al. 2012), the meaning in life refers to beliefs concerning

one's own life and perception of the world. The concept of the meaning in life is relatively new for career counseling.

This concept was incorporated into the career field along with the developmental approach after the 1950s (Super 1957). The concept of self-efficacy has been focused on in evaluating the lifelong career development process in the last 20 years (Gainor 2006). Taylor and Betz (1983) whose studies on self-efficacy refer to the meaning in life as an adaptation process to a life-threatening event. They also mention the search for the meaning in life includes the need for understanding the reason why a crisis occurs and what its impact is. The career decision-making process is of significant influence on one's future life and it may turn into a crisis at times. In the literature, there is no study as to the relationship between direct self-efficacy and the meaning in life. However, it is found out that there exist the studies on the correlation between the career process and work life and the meaning in life. Allan et al. (2015) stated that working life is a moderator variable in predicting the meaning in life. According to them, there is a direct correlation between working life and one's holistic view of his/her own life. The individuals who find their lives meaningful are successful in working life, while others become unsuccessful. Park (2010) stated that working life is stressful and individuals may be influenced by that stress in the long term. In stressful environments, the life satisfaction of the working individuals generally decreases. This data can be especially valuable for the individuals who are in the process of career decision-making. Individuals should well foresee the likely stressors that they could encounter in the process of choosing the appropriate working environment and career. Dunn and O'Brien (2009) called attention to this notion. The stressors that individuals encounter during their working life have adverse effects on their perception of the meaning in life in the long term. The studies confirm that there is a correlation between the concept of the meaning in life and the beliefs of career decision-making. Given these, it is thought that one's finding his/her own life meaningful has something to do with his/her beliefs in career decision-making.

Life Satisfaction and Career Decision Self-Efficacy

The studies on life satisfaction began in the 1950s (Diener et al. 1985; Veenhoven 1996). Life satisfaction means evaluating the whole life positively according to one's own criteria determined by oneself. This concept covers an aspect of working life. According to Schmitter (2003), finding one's life meaningful and having a successful career are among the factors influencing his/her life satisfaction. In the recent studies on the concept of career, it is cited that the variables based on career such as career calling (Dumulescu and Opre 2014; Praskova et al. 2015), career adaptability (Duffy et al. 2015; Fiori et al. 2015; Santilli et al. 2014), career orientations

(Asamani et al. 2015), career behaviors (Hirschi 2014), career-work life (Shanafelt et al. 2014) have significantly positive correlations each other. Also, the recent studies on the concept of self-efficacy indicate that there is a positive correlation between self-efficacy and life satisfaction. It is set forth that the higher the self-efficacy is, the higher the job satisfaction is (Chang and Edwards 2015) and the higher the life satisfaction is (Ansari and Khan 2015; Azizli et al. 2015; Maggiori et al. 2015). Guarnaccia et al. (2016) attracted attention to the correlation between the professional self-efficacy and job satisfaction. It is noted that particularly the individuals who enjoy experience in their career and high self-efficacy beliefs have a more successful career life and thus their life satisfaction is higher (Locke et al. 1996). Korman (1970) stated that there exist a significant correlation between the job satisfaction and self-efficacy. The individuals with high self-efficacy have the high cognitive awareness of career choice and behavior modification skills. All these studies show that life satisfaction is an important variable in one's career. However, there is no specific study on whether there is a correlation between CDSE and life satisfaction.

The Aim and Hypothesis of the Present Study

Drawing from the researches above, in the present study, it is examined the role of the meaning in life and life satisfaction in the prediction of university students' CDSEs. Based on this aim, the hypotheses below are developed.

> Hypothesis 1: There are significant positive correlations between university students' career decision self-efficacy and life satisfaction and the meaning in life.
> Hypothesis 2: Life satisfaction and the meaning in life positively predict career decision self-efficacy significantly.

Method

Participants and Procedure

Turkish university students [$n = 440$, 332 females (75.5%) and 108 males (24.5%)] aged 18–21 years [mean age of 20.90 years (sd = 1.97)] were recruited from a state university located in the Eastern Black Sea Region in Turkey through a convenient sampling method. The instruments were administered to the students in groups, in a class environment, by the researchers. Before the administration of the instruments, the students were given the requisite information about the aim of the research and how the measurement scales should be answered. 10 students had to be excluded because of their not responding properly to all instruments, so the final study group consisted of 440 participants. The permissions needed

are taken from the faculty directory. Also, the permissions for using instruments are taken. The data collection process has continued for 15 min.

Instruments

The demographic information form, The Career Decision Self-Efficacy Scale- Short Form (CDSE-SF), the Meaning in Life Scale (MLS) and the Life Satisfaction Scale (LSS) were used as instruments.

The Demographic Information Form

That form was prepared by the author. It includes the questions about the ages, gender, fields of the participants. Expert opinion was applied in preparing the form.

The Career Decision Self-Efficacy Scale- Short Form (CDSE-SF)

Developed by Betz et al. (1996) and adapted into Turkish culture by Işık (2010), CDSE-SF is a Likert type scale (From 1 Never trusting to 7 Very trusting). The scale consists of 25 items. Cronbach Alpha reliability coefficient of the scale is determined as 0.88. Pearson correlation moments coefficient calculated at test-retest reliability study after 7 weeks is 0.81 ($p < 0.01$). After the explanatory factor analyses, it is determined that it is possible to have a total score (explaining the 49% of total variance) from the scale. Adaptation values appeared with Confirmatory Factor Analyses (CFA) are calculated as $\chi^2 = 336.73$, GFI = 0.90, CFI = 0.90, RMSEA = 0.048 and SRMR = 0.078 (Işık 2010). In the present study, CFA via AMOS 18.0 verified the one-factor structure (GFI = 0.90, AGFI = 0.91, CFI = 0.90, NFI = 0.92 and RMSEA = 0.062) with an internal consistency coefficient of 0.89. A high score from the scale means a high level of CDSE.

The Meaning in Life Scale (MLS)

The scale developed by Steger et al. (2006) is adapted into Turkish Culture by Demirbaş (2010). It is a likert type scale with 10 items (From 1 Absolutely incorrect to 10 Absolutely correct). As the result of the explanatory factor analyses, the scale has only one factor (explaining the 45% of total variance). Cronbach Alfa reliability coefficient is 0.81. Pearson correlation moments coefficient calculated at test-retest reliability study after 4 weeks is 0.70 ($p < 0.01$). Adaptation values appeared with CFA are calculated as $\chi^2 = 63.32$, GFI = 0.96, AGFI = 0.93, IFI = 0.98, CFI = 0.98 and RMR = 0.052 (Demirbaş 2010). In the present study, CFA via AMOS 18.0 verified the one-factor structure (GFI = 0.90, AGFI = 0.90, CFI = 0.91, NFI = 0.93 and RMSEA = 0.68) with an internal consistency coefficient of

0.83. High scores from the scale mean a high level perception of the meaning in life.

Life Satisfaction Scale (LSS)

LSS is developed by Diener et al. (1985) and adapted into Turkish culture by Köker (1991). It is a Likert type scale with 5 items and scored between 1 and 5 (From 1 Never appropriate to 5 very appropriate). After the explanatory factor analyses, it is determined to have one factor from the scale (explaining the 46% of total variances). Cronbach Alfa reliability coefficient of the scale is 0.76. Pearson correlation moments coefficient calculated at test-retest reliability study after 3 weeks is 0.85 ($p < 0.01$) (Köker 1991). In the present study, CFA via AMOS 18.0 verified the one-factor structure (GFI = 0.92, AGFI = 0.93, CFI = 0.92, NFI = 0.90 and RMSEA = 0.712) with an internal consistency coefficient of 0.80. A high score from the scale means a high level perception of life satisfaction.
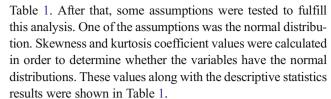
Data Analysis

Firstly, the data's normal distribution was controlled. After the normality was determined, the statistical analysis was performed by using the Pearson product-moment correlation co-efficient and multiple linear regression analysis. Before the regression analyses, the assumptions needed for the analyses (Skewness-Kurtosis Normality Test, multi-collinearity, Variance Inflation Factor, Variance Inflation Factor) were controlled and the results were shared. The SPSS software (Statistical Package for the Social Sciences, version 23.0, SPSS Inc., Chicago, USA) and AMOS 18.0 were used for the data analysis.

Results

It was first started with the identification of the data for analysis. The self-efficacy levels (mean = 93.377, sd = 12.485) of the participants, and likewise the scores of their meaning in life (mean = 45.031, sd = 7.632) and life satisfaction (mean = 24.427, sd = 5.639) were calculated on their mean scores because there was no cut-off score in the scales. High scores from the scales mean a high level of career decision-making self-efficacy, the meaning in life and life satisfaction. The mean and standard deviation values were shown in

Table 1. After that, some assumptions were tested to fulfill this analysis. One of the assumptions was the normal distribution. Skewness and kurtosis coefficient values were calculated in order to determine whether the variables have the normal distributions. These values along with the descriptive statistics results were shown in Table 1.

For a normal distribution of the variables, skewness should be less than |3.0| and kurtosis should be less than |10.0| (Kline 2011, p.63). Based on this, it was seen that kurtosis and skewness for CDSE (sd = 12.485, Skewness = −0.591, Kurtosis = 2.242), the meaning in life (sd = 7.632, Skewness = 0.306, Kurtosis = 1.503) and life satisfaction (sd = 5.639, Skewness = −0.783, Kurtosis = 0.327) were less than the values mentioned above. According to these values, it was determined that the data have normality. Then, the correlation analyses were done with the Pearson correlation coefficients technique. The participants completed a range of standardized measures assessing CDSE-SF, MLS, and the LSS. Based on the Pearson correlation analyses, the positive and significant correlations between life satisfaction ($r = 0.446$, $p < 0.01$), the meaning in life ($r = 0.167$, $p < 0.01$) and CDSE were determined. These results were shown in Table 2.

Then, for the multiple regression analyses, it should be controlled whether the data meet the assumptions. According to Şencan (2005, p.222), if the correlation is higher than 0.90, there is a multi-collinearity problem at the data. For the present study, the correlation values between the variables were examined as acceptable (between 0.167 and 0.446). Another process to test multi-collinarity problems was the calculation of Variance Inflation Factor (VIF) and Tolerance Value (TV). Avoiding the multi-collinearity problem, VIF value should be lower than 10 and Tolerance Value (TV) should be higher than 0.2 (Field et al. 2012, p.242). In the present study, when the data were examined, it was determined that there was not a multi-collinearity problem between the variables (TV = 1.000, VIF = 1.000).

Based on these results, standard multiple regressions were conducted with the meaning in life and life satisfaction entered as the predictor variables and CDSE as the criterion variables. The overall model predicted the level of CDSE (F = 33,542, $p < 0.01$), explaining 22.9% of the overall variance ($R^2 = 0.236$; Adj $R^2 = 0.229$). The meaning in life ($\beta = 0.193$, $t = 3.242$, $p = 0.001$) and life satisfaction ($\beta = 0.457$, $t = 7.692$, $p = 0.001$) were the significant individual predictors of CDSE. These results are shown in Table 3.

Table 1 Normality distribution and descriptive statistics for variables

Variable	Minimum	Maximum	Mean	Sd	Skewness	Kurtosis
1.Career decision-making self-efficacy	35	124	93.377	12.485	−0.591	2.242
2. The Meaning in life	24	81	45.031	7.632	0.306	1.503
3.Life satisfaction	5	35	24.427	5.639	−0.783	0.327

Table 2 Correlations

	1	2	3
1.Career Decision-Making Self Efficacy	1	0.167[a]	0.446[b]
2.The Meaning in life		1	0.143[a]
3.Life Satisfaction			1

[a] Correlation is significant at the 0.05 level

[b] Correlation is significant at the 0.01 level

Discussion and Implications

The present study focuses on which level of the meaning in life and life satisfaction predicts the CDSE of university students. According to the result of the study, there were the significantly positive correlations between life satisfaction, the meaning in life and CDSE (H1). Moreover, it was determined that the meaning in life and life satisfaction significantly predicts CDSE (H2).

The first result of the present study indicates that the meaning in life was a significant predictor of CDSE. Given the literature, the concept of the meaning in life was new for the career counseling and CDSE. The studies on that were divided into two stages, self-efficacy and career self-efficacy. There was a unique study directly focusing on the meaning in life and self-efficacy by Lightsey and Sweeney (2008). They mention that self-efficacy was an important predictor of the meaning in children's lives with learning disabilities. Furthermore, in the studies on the concept of the lifelong development (Berry and West 1993; DeWitz et al. 2009), it was stated that self-efficacy was an important predictor in terms of reflecting one's belief in his/her own internal dynamics during the lifelong development process. It was known that the concept of lifelong was worked on through the developmental approach after the 1950s. Gainor (2006) emphasized self-efficacy expectations in analyzing the lifelong career development over the last 20 years, yet there were some specific studies conducted in later years. The most important reason why the meaning in life was included in the study was that there came out new and valuable results about the correlation between the meaning in life and self-efficacy, career self-efficacy. In terms of career field, there was only one study conducted by Duffy and Sedlacek (2010). They stated that the meaning in life was an

Table 3 Multiple linear regression analysis results

Predictor variables	B	SE	B	t
(Constant)	54,463	5.624		9.685
The Meaning in life	0.315	0.097	0.193	3.242[a]
Life Satisfaction	1.012	0.132	0.457	7.692[a]

$R^2 = 0.236$, and Adjusted $R^2 = 0.229$

[a] t value is significant at the 0.001 level

important predictor of the career calling development for students. Depending on the all these studies and the results of the present study, it was stated that one's finding his/her own life meaningful was closely associated with the high level of his/her own internal dynamics and his/her beliefs in his/her environment. Especially in terms of career, it was thought that individuals who find their lives meaningful would have a positive attitude and belief towards their careers which one of the most important aspects of life.

Another result of the present study shows that life satisfaction was one of the most significant predictors of CDSE. According to Donovan et al. (2002), one's activities during his/her lifetime have much to do with his/her satisfaction that s/he gets from them, one of which is working life, that's, career. According to Super (1957), work has a substantial share in one's activities during his/her lifetime. In the literature, it was observed that there is a significantly positive correlation between life satisfaction and the variables related to one's career (Dumulescu and Opre 2014; Praskova et al. 2015; Duffy et al. 2015; Fiori et al. 2015; Santilli et al. 2014; Hirschi 2014; Asamani et al. 2015). Moreover, the specific studies indicate that individuals with a strong sense of self-efficacy can determine themselves more realistic and more attainable careers and can become more successful (Ansari and Khan 2015; Azizli et al. 2015; Conklin et al. 2013; Deemer et al. 2014; Maggiori et al. 2015; Wright et al. 2012). Given these studies and the results of the present study, it was mentioned that individuals with high career self-efficacy expectations set more realistic targets in their career and they were more successful in achieving them. Through one's career, an individual made great strides in life satisfaction from his/her performance, relationships and earnings in the workplace. Because of that, a strong belief in career self-efficacy positively influences one's perception of life as well.

There were some limitations of the present study. The study was carried out only in a city because it was not under a project or fund. Another limitation was the limited duration of the permission from the university for the data collection. The other limitation was the data of the study obtained from only one type of faculty (Business Administration, Economics, Finance, Public Administration) because no proper data could be obtained from other types of faculties and the students were reluctant to fill in scales owing to their heavy schedule. Therefore, they were excluded from the study.

As a result, the study had a contribution to career counseling in that it gave a significant explanation for the meaning in life and life satisfaction from career decision-making self-efficacy. Especially, the present study aims to contribute to the studies on career self-efficacy expectations having been conducted since the 1990s through the new results regarding the variables of the meaning in life and life satisfaction in terms of positive psychology. It is considered that the results concerning the concepts of the meaning in life and life satisfaction are of great
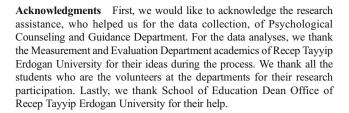
importance for career counselors' new approaches to their clients' career decision-making process.

Theoretical Implications

In the present study, it was indicated that there was a significant correlation between the variables based on the concept of life, the meaning in life and life satisfaction, and career decision efficacy. The concepts of the meaning in life and life satisfaction had not been used in the studies on career self-efficacy in the last 20 years. On examining the literature based on career self-efficacy, the concept of life was of a great significant importance for the career. Such researchers as Donald Super and Eli Ginzberg highlighted the importance of the concept of life in career psychology about 60 years ago. Therefore, especially in recent years considering the effects on the career of positive psychology, it was thought that the concept of life and its related variables are important in career counselors' planning about their clients' career decision-making process. However, there were few studies on that subject. It was considered that career counselors need more research results.

Managerial Implications

Primarily, career counselors working on CDSE can benefit from the research results within the scope of individual counseling and group counseling. Within the scope of individual counseling, counselors may enable their clients to go through direct and indirect experiences in order to help their clients improve their own perception of the meaning in life while working with clients with a low sense of career decision-making self-efficacy. It is possible to mention the effects of self-efficacy as a result of these experiences on future acquisitions and life satisfaction. Within the scope of group counseling, in psycho educational group intervention programs, based on CDSE, prepared by career counselors, activities aiming at increasing their clients' level of the meaning in life and life satisfaction may be suggested to be used. Further research on the issue of the meaning in life which is new to career field and career counselors should be done conceptually and empirically. Moreover, the results of the study were suggested to be exploited in the career centers of universities. Such centers were important so as to be able to access to a large number of students in no time. Some various seminars, panels and conferences could be arranged in the centers in order to inform individuals with a low sense of career decision-making self-efficacy about the significant variables in this study. Some workshops in accordance with empirical patterns could be organized by experts. As well as universities, experts based in employment agencies of private and public institutions could plan some studies on the variables with a significant correlation in this study.

Compliance with Ethical Standards

Ethical Statements All the procedures performed in studies involving the participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all the individual participants included in the study.

Conflict of Interest Author A declares that there is no conflict of interest. Author B declares that there is no conflict of interest.

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